

WHAT IS CLAIMED IS:

1. A transfer pressure roll which pressurizes a laminated sheet constituted by a recording matter, having a finely rough surface providing with convex portions having heights of 5 to 20 μm at 50 to 500 μm pitches, on which an recorded image is formed and a protection film provided with a supporting body and a transferable protection layer, wherein the transferable protection layer are opposed to the finely rough surface, so that the transferable protection layer is pressed to the recorded image under a heated condition, the transfer pressure roll comprising:

a cylindrical roll body; and

an elastic layer covering a surface of the roll body and being brought into pressing-contact with the image protection film,

wherein a hardness of elastic matter forming the elastic layer is HA 40 degrees or more by a measuring method specified by JIS-K6253.

2. The transfer pressure roll according to Claim 1, wherein the elastic matter is any of silicon rubber, natural rubber, synthetic natural rubber, styrene rubber, butadiene rubber, chloroprene rubber, butyl rubber, nitril rubber, ethylene-propylene rubber, and fluororubber.

3. The transfer pressure roll according to Claim 1, wherein a thickness of the elastic layer is 0.2 to 3 mm.
4. The transfer pressure roll according to Claim 1, wherein a heating source is arranged inside the roll body.
5. The transfer pressure roll according to Claim 1, wherein the recording matter is formed with a recording sheet including a polyolefine coated sheet having a surface worked so that 75°
10 degrees specular glossiness specified by JIS-P8142 becomes less than 30%, and an ink-absorption layer provided on the worked surface.
6. The transfer pressure roll according to Claim 5, wherein
15 a center average roughness (S_{Ra}) of the worked surface is larger than 0.5.
7. The transfer pressure roll according to Claim 1, wherein the supporting body is a 4 to 50 μm-thick biaxial drawing
20 polypropylene film.
8. The transfer pressure roll according to Claim 1, wherein the transferable protection layer is 2 to 20 μm thick.
- 25 9. The transfer pressure roll according to Claim 1, wherein

the transferable protection layer comprises one kind of material or, two or more kinds of materials selected from a group comprising acrylic copolymer, acryl-styrene copolymer, vinyl acetate resin, vinyl acetate copolymer, vinyl chloride-vinyl acetate copolymer, vinyl chloride-acrylic copolymer, vinyl acetate- acrylic copolymer, and acrylic-silicon copolymer.

10. A transfer device comprising:

a laminated sheet forming section which supplies, on a recorded image of a recording matter in which the recorded image is formed on a finely rough surface on which a large number of convex portions having 5 to 20 μm heights are formed at 50 to 500 μm pitches, an image protection film having a supporting body and a transferable protection layer provided on the supporting body so that the transferable protection layer are opposed to the finely rough surface, and which superimpose the image protection film and the recording matter on each other thereby to form a laminated sheet;

a press section which heat-pressurizes the laminated sheet thereby to attach the transferable protection layer on the recorded image by using pressure; and

a peeling-off section which peels off the supporting body from the laminated sheet which has passed through the press section,

wherein the press section includes a pressure member and

a pressure reception member, the laminated sheet is permitted to pass through a nip portion formed between the pressure member and the pressure reception member which are brought into pressure contact with each other, and

5 the pressure member is a transfer pressure roll comprising:

 a cylindrical roll body; and

 an elastic layer covering a surface of the roll body and being brought into pressing-contact with the image protection
10 film,

 wherein a hardness of elastic matter forming the elastic layer is HA 40 degrees or more by a measuring method specified by JIS-K6253..

15 11. An image recording apparatus including a ink jet recording portion which ejects ink on a finely rough surface of a recording sheet having the finely rough surface on which a large number of convex portions having 5 to 20 μm heights are formed at 50 to 500 μm pitches thereby to form an ink jet image,
20 and a protection layer forming portion which thermal-transfers, onto the ink jet image, a transferable protection layer of an image protection film comprising a supporting body and the transferable protection layer provided on the supporting body thereby to form a protective layer, wherein

25 the protection layer forming portion is composed of the

transfer device according to Claim 10.